



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-------------|----------------------|---------------------|------------------|
| 09/720,275 | 02/22/2001 | Gunter Fuhr | A33828 PCT U | 9406 |
| 21003 | 7590 | 11/16/2004 | | |
| BAKER & BOTTS | | | EXAMINER | |
| 30 ROCKEFELLER PLAZA | | | MUTSCHLER, BRIAN L | |
| NEW YORK, NY 10112 | | | | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1753 | |

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------|----------------------------------------------|---------------------------------|
| Advisory Action | Application No. | Applicant(s) |
| | 09/720,275 Examiner Brian L. Mutschler | FUHR ET AL. Art Unit 1753 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 01 November 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) The period for reply expires 3 months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
 - (a) they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) they raise the issue of new matter (see Note below);
 - (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. Applicant's reply has overcome the following rejection(s): _____.
4. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: 33-35.

Claim(s) rejected: 20-32 and 36-38.

Claim(s) withdrawn from consideration: _____.

8. The drawing correction filed on _____ is a) approved or b) disapproved by the Examiner.

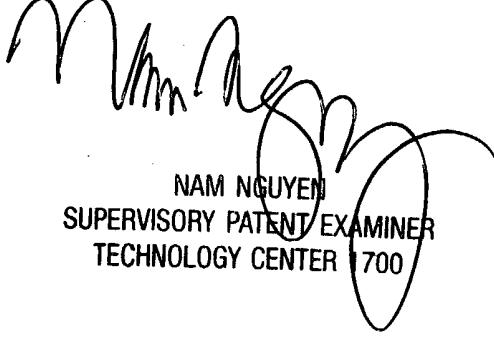
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. Other: _____.

Continuation of 2. NOTE: The proposed amendment presents new limitations requiring further consideration and raises the issue of new matter by adding the limitation, "the field barrier has a predetermined parabolic or hyperbolic curvature relative to the longitudinal extension of the channel." While the specification does provide support for a hyperbolic field barrier in paragraph [0031] and in Figure 1b, the specification does not support for the proposed limitation in combination with limitations recited in the dependent claims. For example, claim 34 requires a third microelectrode arranged as a field-forming auxiliary electrode. In paragraph [0033] of the specification, Applicant states that auxiliary electrode distorts the field lines between the two other microelectrodes. As shown in Figure 1d, this distortion does not appear to create a parabolic or hyperbolic field barrier. In addition to the example provided above, the combination of the proposed limitation with other limitations recited in dependent claims also do not appear to be supported by the specification. Therefore, the proposed limitation is deemed to present new issues for consideration and to raise the issue of new matter.

In addition, the proposed amendment raises an additional question. Which direction is the parabolic or hyperbolic curvature relative to? Defining the direction of the longitudinal extension of the channel as the x-axis and the plane defined by the width and length of the channel as the x-y plane, the specification appears to define the limitation as a cross-section or projection in the x-y plane that has a parabolic or hyperbolic shape (see Figure 1b). However, it is unclear if the limitation is also meant to comprise curvature in the x-z plane or even the y-z plane. This distinction becomes important when comparing the limitation to the field barriers created in prior art references such as Pethig et al. and Fiedler et al. In Figure 16a of U.S. Pat. No. 5,814,200, Pethig et al. disclose a field barrier having a parabolic cross section in what would correspond to the y-z plane of the instant application; Figure 16b also shows that the field barrier has a parabolic cross-section in the x-z plane. In addition, the hyperbolic quadrupole electrode assembly of Pethig et al. creates a field barrier having a parabolic cross-section in the x-z and y-z planes. Fiedler et al. show a field distribution in Figure 4A having a parabolic cross-section in the x-y and x-z planes.

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's arguments rely on the proposed limitation, which as explained above, will not be entered due to the new issues raised.


NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700